

Vicksburg, and De Soto, La., extending from the right bank of the river in a southeasterly direction. At Nashville the Cumberland fell from the 1st to the 3rd, rose to the 6th, fell five feet to the 12th, rose five feet on the 13th, slowly fell eight feet to the 25th, and rose one foot the 26th, after which its decline was regular. The changes in the Ohio were of slight importance, except at Cincinnati, when a rise of over eleven feet occurred between the 15th and 18th. At Pittsburgh navigation was nearly suspended the 11th, and the Alleghany said to be lower on the 14th than for many years. At Augusta, the Savannah river reach its highest point, 16 feet 6 inches, on the 1st, from which there was almost a steady decline until it reached its minimum, 5 feet 8 inches, on the 30th. At Trenton, N. J., the Delaware river was one inch lower on the 27th than it had been during the past fifty-four years. On 30th, river extremely low at Breckenridge. Connecticut river very low on 31st at Westminster, Vt. Delaware and Luckawanna rivers 14 inches below lowest recorded low-water mark, 1836, in vicinity of Honesdale, Penn.

TEMPERATURE OF WATER.

As heretofore, the maximum and minimum temperatures alone, with the average depth of the water, are given in the table on the lower right-hand corner of chart No. II. The least range of 3° was recorded at Eastport and St. Marks, and the greatest of 24° at Burlington, Vt.

ATMOSPHERIC ELECTRICITY.

A peculiar electrical display was observed on Pike's Peak, during the evening of the 18th. It was attended by a strange singing or rather sizzling on the wire, which was distinctly illuminated for an eighth of a mile, the electricity being thrown off in brilliant scintillations. Every metallic point and surface were also tipped or covered with light, the entire atmosphere having been apparently highly charged with electricity. Snow was falling at the time, and the air was very humid. At Omaha, during the afternoon of the 16th, communication by telegraph was interrupted by the electricity on the wires, and the electrical fire-alarms were repeatedly sounded.

Thunder Storms.—The sections in which they have occurred have been very generally mentioned in giving the details, under the head of low pressure areas. The dates, states, and number of stations in each state when more than one are: 1st, Fla. 3, Neb., Tenn., S. C., Ga. 2, and Col. 2; 2nd, Tenn. 2, Dak. 2, Texas, 2, Ala. and Fla.; 3rd, Dak., Ga. 3, Wis., Ala., Tenn. and Minn.; 4th, Ala. 2, Kan., S. C., Ga. 2, Ind., Iowa 3, Kan. 3, Mich. 3, Ohio 2, Tenn. 2, Wis. 5, and Fla.; 5th, Dak., Minn. 3, Ill., Iowa, 5, Kan. 3, Mo., Neb. 4, Ohio 4, Tenn., Mich., W. Va., Ind., N. Y., Ala., Penn., Ky. and Ga.; 6th, Ill. 3, La., Me., Mich., N. Y. 2, Ohio, Penn., Tenn., Vt., Va., Ala., N. C., Iowa, Fla. and Ga.; 7th, Ark., Conn., Fla. 2, Ill., Ind. 2, Me., Mass. 5, N. Y. 3, Ohio 3, Penn., Vt., W. Va., S. C., Ala., Texas and Ga.; 8th, Ala., Ill., Tenn. 3, Va. 2, Ind. 2, Ohio, Md., Fla., Dak. and Ind. Ter.; 9th, Ala. 2, Ill. 3, Minn., Ohio 2, S. C. 2, Tenn., Va., Wis., Dak., Miss., N. C. 2, Fla., Ind. 2, Texas, Kan. and Md.; 10th, Ga., Ill., Iowa 2, La., Mich., N. C. 2, Ohio 3, Tenn. 2, Wis., Va. 2, Ind. 2, Ala., Md. 2, and Dak.; 11th, Iowa, Ky., Mich. 2, Ohio 2, Penn., S. C., Miss. and W. Va.; 12th, Conn. 2, Ind., Kan., Mass., S. C., Ala., Cal., Md., Texas, Dak. and Penn.; 13th, Ill. 2, Fla. 2, Ga. 2, Iowa 2, Minn., Mass., Mo., Neb. 3, Penn., S. C. 2, Texas 2, W. Va., Md., Kan. and Wis.; 14th, Kan. 2, Fla. 2, Mo. 2, Neb., Ohio, S. C. 2, and Ala.; 15th, N. Y., Conn., Ill., Kan., Me. 5, Mass. 5, Ohio, Tenn., Fla., Ala. 2, Miss. and N. C.; 16th, Ill. 2, Iowa 4, Kan., Neb. 3, Ind., Ohio, Ala., Ky. and Fla.; 17th, Ill. 2, Ky. 2, Minn., Neb. 3, Ohio 2, Va. 2, S. C., Penn. 2, Kan., N. J. 2, Iowa 2, W. Va., Fla. and Dak. 3; 18th, Minn., Ill. 2, Ind. 2, Iowa, Kan., Mich., Ohio 2, S. C., Wis., Ala., N. C. 3, Neb. and Dak.; 19th, Kan. 4, Mich., Mo., Neb., N. Y. 3, S. C. and Ala.; 20th, Neb. 3, Kan. 2, La., Wis., N. H., N. Y., S. C., Tenn., Vt. 2, Me., and Ala. 2; 21st, Iowa, Neb. 3, Fla., Cal., Ala. and Kan.; 22d, Dak., Minn. 2, Iowa 2, Mich. 2, Wis. 2, Ala. and Fla.; 23d, S. C., Iowa 2, Wis. and Mich. 2; 24th, N. C., Ga., Ill. 2, Iowa 4, Kan., Mo. 2, Ohio 5, Tenn. 3, Wis. 5, S. C., Ind., Ala., W. Va. and Mich.; 25th, Penn. 2, N. Y., Ga., La., Me., Mass. 2, N. C. 2, Tenn., Vt. 2, S. C., Tex. 2, Miss., W. Va. and Ala.; 26th, N. C. 2, S. C. 2, Me. 3, Mass., Penn. 2, Vt., Mo., Tex. and Ga.; 27th, Fla. 2, Ga. 2, Penn., N. C., Dak., Ala. and Tex.; 28th, Iowa 2, Kan., La. 2, Neb., Minn., Ga., Fla. and Miss.; 29th, Ala. 2, Ill. 2, Iowa 4, La., Wis. 2, Dak., Mich. and Fla.; 30th, Ill. 3, Ind. 4, Iowa 3, Mass., Mo. 2, Neb. 2, Nev., Ohio 2, Minn. and Cal.; 31st, Ill. 5, Iowa 2, Kan. 3, Mich., Neb. 2, Nev., Ohio 2, S. C. 2, Tenn. 3, N. C., Ky. and Fla.

Auroras.—That of the 25th was most extensively observed. Displays were reported as having been seen on the 1st at Buffalo; 3d, Mt. Auburn, Ohio; 10th, Cornish, Me.; 11th, Vevay, Ind., Gardiner, Me., and Duluth; 12th, Embarrass and Le Roy, Wis., and Escanaba; 13th and 14th, Pembina; 15th, Auburn, N. H., and Pembina; 16th, Le Roy, Wis., and Pembina; 17th, Pembina; 18th, Eastport; 19th, Pembina; 20th, Marquette; 21st, Washington; 24th, Duluth; 26th, Ft. Stevenson, D. T., Cresco and Ames, Iowa, Duluth, St. Paul and Utica, Wis., Escanaba, Alpena, Port Huron, Erie, Buffalo, and Gardiner, Me.; 28th, Gardiner, Me., and Duluth; 29th, Gardiner, Me.

OPTICAL PHENOMENA.

Solar Halos.—1st, Iowa, Tenn.; 3rd, Ga., Ind. Ty.; 4th, N. C.; 5th, Miss., Ohio; 6th and 7th, S. C.; 8th,